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EXAMINER

O CONNOR, GERALD J

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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Paper No. 9

Application Number: 09/731,772
Filing Date: December 8, 2000
Appellant(s): Baseman et al.

MAILED

NOV 19 2003

C. Lamont Whitham
(Reg. No. 22,424)
For Appellant

GROUP 3600

EXAMINER'S ANSWER

This examiner's answer has been prepared in response to appellant's brief on appeal
filed August 25, 2003 (Paper No. 8).

(1) *Real Party in Interest*

A statement identifying the real party in interest is contained in the brief.

(Assignee of record, *International Business Machines Corp.*)

(2) *Related Appeals and Interferences*

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

(None.)

(3) *Status of Claims*

The statement of the status of the claims contained in the brief is correct.

(Claims 1-12 pending, rejected, and appealed.)

(4) *Status of Amendments After Final*

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(No amendment after final has been filed.)

(5) *Summary of Invention*

The summary of invention contained in the brief is correct.

(6) *Issues*

The appellant's statement of the issues in the brief is correct:

- I. Whether or not claims 10-12 are unpatentable under 35 U.S.C. 102 for being anticipated by the admitted prior art.
- II. Whether or not claims 1-9 are unpatentable under 35 U.S.C. 103 for being obvious over the admitted prior art.

(7) *Grouping of Claims*

Appellant's brief includes a statement that claims 1-12 do not stand or fall together and provides reasons as set forth in 37 CFR 1.192(c)(7) and (c)(8). Therefore, the claims will be addressed in the following two groups, as suggested by appellant:

Group I: Claims 1-9 stand or fall together because appellant's brief does not include a statement that this grouping of claims does not stand or fall together and reasons in support thereof. See 37 CFR 1.192(c)(7). (Group requested by appellant.)

Group II: Claims 10-12 stand or fall together because appellant's brief does not include a statement that this grouping of claims does not stand or fall together and reasons in support thereof. See 37 CFR 1.192(c)(7). (Group requested by appellant.)

(8) *Claims Appealed*

The copy of the appealed claims contained in the Appendix to the brief is correct.

(9) *Prior Art of Record*

The prior art of record relied upon in the rejection of claims under appeal is as follows:

Admitted prior art, as described by appellant in the written specification.

(10) *Grounds of Rejection*

I. Apparatus claims 10-12 are rejected under 35 U.S.C. 102 as being clearly anticipated by the admitted prior art, as described in the written specification. Note that, in making this rejection, the nature of the particular portfolio/inventory of assets being evaluated has been deemed merely an intended use of the claimed invention, hence, afforded little patentable weight.

The admitted prior art, as described in the written specification, clearly indicates that the invention does not include any new apparatus, but rather, allegedly “converts” one type of problem to another type of problem by using an existing problem-solving apparatus to solve the new problem for which it had previously (allegedly) never been used (i.e. using the existing apparatus for a “new” use). While the specification discloses much about the particulars of the claimed inventive method, the apparatus (e.g. computer, storage device, etc.) used to perform the method is entirely conventional, thus, acceptably disclosed in a merely superficial (non-enabling) fashion.

II. Method claims 1-9 are rejected under 35 U.S.C. 103(a) as unpatentable over the admitted prior art, as described in the written specification.

The admitted prior art, as described in the written specification, clearly indicates that the instant invention as a whole involves no new financial formulae or analytical techniques. See, for example: page 3, lines 8-9, "It is therefore an object of the present invention to enable firms to use existing financial asset portfolio management tools to manage their inventory;" lines 10-11, "This invention enables companies to calculate optimal inventory quantities using a technology that already exists in the field of finance;" and, lines 23-24, "This invention enables firms to use well established portfolio management tools that are developed in finance industry in managing their inventory." The instant invention lies in using a computer to apply these known manual analytical techniques to simply solve a known math problem concerning the valuation of assets, possibly wherein the assets are physical assets of an inventory/portfolio (such as cars stored in a warehouse) instead of financial assets of an inventory/portfolio (such as the titles of the cars in the warehouse or the deed to the warehouse itself).

The instant invention claims "converting" the asset valuation problem from one type of problem for an "inventory" to another type of problem for a "portfolio," but no "conversion" is actually performed at all. The "conversion" comprises simply using/applying one set of known formulae/techniques allegedly preferred for "portfolios" instead of using another set of known formulae/techniques allegedly preferred for "inventories." No actual "conversion" is performed because: (1) there is no patentable distinction between a "portfolio" and an "inventory," both terms comprising a collection of assets, thus there is nothing to convert; and, (2) nothing is done to the problem to actually effect any act of "converting," the sole extent of "conversion" merely

comprising applying a different set of formulae/techniques than would allegedly otherwise be applied. To the extent that “portfolio” implies that the assets are “financial assets” and “inventory” implies the assets are “physical assets,” physical assets and financial assets are considered a substitution of art-recognized equivalents for purposes of valuation problems, thus, an obvious substitution to make in applying well known analytical formulae/techniques to the solution of a well known mathematical problem concerning the valuation of assets. Regarding the use of a computer to perform the known analysis/techniques/solution for valuing the assets, it has been held that *simply providing a mechanical or automatic means to replace manual activity which has accomplished the same result involves only routine skill in the art*¹.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have modified the method of the admitted prior art for evaluating financial assets, so as to perform a substitution of art-recognized equivalents and evaluate physical assets instead, as well as to use a computer to perform the known financial asset valuation formulae/techniques, in order to rapidly and efficiently provide the management of a company with an accurate assessment of the value of the company’s physical assets, since so doing could be performed readily and easily by any person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results, simply as a matter of design choice, and because it has been held that *simply providing a mechanical or automatic means to replace manual activity which has accomplished the same result involves only routine skill in the art*¹.

¹ *In re Venner*, 120 USPQ 192 (CCPA 1958).

(11) Response to Argument

I. Apparatus Claims 10-12 are Anticipated by the Admitted Prior Art

Regarding the argument that the intended use of the apparatus of claims 10-12 is to perform a different method than had previously been performed, *the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art*².

Regarding the argument that the functional language recited in apparatus claims 10-12 recites method steps not comprised by the admitted prior art, *claims directed to apparatus must be distinguished from the prior art in terms of structure rather than function*,³ *as apparatus claims cover what a device is, not what a device does*⁴. Moreover, *a claim containing a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus if the prior art apparatus teaches all the structural limitations of the claim*⁵.

Regarding the argument that the particular material or article worked upon by the apparatus of apparatus claims 10-12 differs from the particular material or article that had been worked upon in the prior art apparatus, *expressions relating the apparatus to contents thereof*

² *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).

³ *In re Danly*, 263 F.2d 844, 847, 120 USPQ 528, 531 (CCPA 1959).

⁴ *Hewlett-Packard Co. v. Bausch & Lomb Inc.*, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990).

⁵ *Ex parte Masham*, 2 USPQ2d 1647 (Bd. Pat. App. & Inter. 1987).

during an intended operation are of no significance in determining patentability of the apparatus claim⁶. Furthermore, inclusion of material or article worked upon by a structure being claimed does not impart patentability to the claims⁷.

So, based on the foregoing, the structural limitations of apparatus claims 10-12 are as follows, with recitations directed to intended use, functional language, and/or material or article acted upon being indicated by brackets, and with verbs reflecting functional language (i.e. what the apparatus *does* rather than what the apparatus *is*) further indicated by underlining:

Claim 10: A computer system [for managing inventory] comprising:

a plurality of clients connected to a common server; and,

a storage system connected to the server, [the storage system storing demand forecast, market price for products, manufacturing or purchasing cost for products, holding and backlogging cost for products, and inventory quantities for products],

[the server receiving inputs from the clients and converting an inventory problem to a financial portfolio problem],

[the server further generating a set of possible inventory investments, computing a value of possible inventory investments, and selecting an inventory investment with a best value].

Claim 11: The computer system [for managing inventory] of claim 10, [wherein the server converts the inventory problem into a financial portfolio problem by expressing the

⁶ *Ex parte Thibault*, 164 USPQ 666, 667 (Bd. App. 1969).

⁷ *In re Young*, 25 USPQ 69 (CCPA 1935), as restated in *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).

inventory problem as a combination of long and short positions and put and call options on an asset].

Claim 12: The computer system [for managing inventory] of claim 11, [wherein the server computes the value of possible inventory investments by decomposing cash flows associated with the inventory investment into a combination of cash flows that can be represented by a portfolio comprised of long and short positions in an underlying asset, computing with a valuation methodology the value of each long and short position in the portfolio, summing values of each long and short position in the portfolio to determine a value of the portfolio, and setting the value of the inventory investment equal to the value of the portfolio].

Therefore, the only actual structure being claimed by appellant is, "*a storage system and a plurality of clients connected to a common server.*"

This broad, generic structure is described/mentioned on page 10 of the specification, but, as the arrangement is a conventional client-server architecture arrangement, no especially detailed disclosure is provided, or needed, as such limited disclosure is, in itself, further evidence that appellant considers the elements to be conventional, well known, prior art elements, because *the specification should disclose how to configure a computer to possess the requisite functionality or how to integrate the programmed computer with other elements of the invention, unless a skilled artisan would know how to do so without such disclosure*⁸.

⁸ *Northern Telecom v. Datapoint*, 908 F.2d 931, 941-43, 15 USPQ2d 1321, 1328-30 (Fed. Cir.), *cert. denied*, *Datapoint v. Northern Telecom*, 498 U.S. 920 (1990).

II. Method Claims 1-9 are Obvious Over the Admitted Prior Art

The admitted prior art, as described in the written specification, clearly indicates that the instant invention involves no new financial formulae or analyses. See, for example: page 3, lines 8-9, “It is therefore an object of the present invention to enable firms to use *existing* financial asset portfolio management tools to manage their inventory;” lines 10-11, “This invention enables companies to calculate optimal inventory quantities using a technology that *already exists* in the field of finance;” and, lines 23-24, “This invention enables firms to use *well established* portfolio management tools that are developed in finance industry in managing their inventory” (all emphasis added).

The instant invention lies in using a computer to apply these known manual analytical techniques to simply solve a known math problem concerning the valuation of assets, wherein the particular non-functional descriptive material being acted upon, the assets, are physical assets of an inventory/portfolio (such as cars stored in a warehouse) instead of financial assets of an inventory/portfolio (such as the titles of the cars or the deed to the warehouse itself).

The instant invention claims “converting” the asset valuation problem from one type of problem for an “inventory” to another type of problem for a “portfolio,” but no “conversion” is actually performed at all. No actual “conversion” is performed because: (1) there is no patentable distinction between a “portfolio” and an “inventory,” both terms comprising a *collection of assets*⁹, thus there is nothing to convert; and, (2) nothing is done to the problem to

⁹ *The American Heritage Dictionary of the English Language, Third Edition (1992).*

actually effect any act of “converting,” the sole extent of “conversion” merely comprising applying a different set of formulae/techniques than would allegedly otherwise be applied.

Whereas *nonfunctional descriptive material cannot render nonobvious an invention that would have otherwise been obvious*¹⁰, and whereas even *ingenious application of known principles to known problem by use of devices already known and understood to produce predictable result does not amount to invention*¹¹, appellant’s claimed invention of applying known principles to a known problem by use of known devices, merely acting upon (allegedly) different non-functional descriptive material, fails to produce any nonobvious result.

Regarding the argument that the examiner is improperly equating “portfolio” and “inventory” because the only basis for doing so is appellant’s own disclosure, thus is basing a conclusion of obviousness upon improper hindsight reasoning, it must be recognized that *any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning, but so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant’s disclosure, such a reconstruction is proper*¹². Since the terms portfolio and inventory are synonymous, as indicated by the dictionary/thesaurus, they would certainly be recognized as synonyms/equivalents by any person of ordinary skill in the

¹⁰ *In re Gulack*, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983).

¹¹ *Barrott et al. v. The Drake Casket Company*, 127 USPQ 69 (DC WMich 1960).

¹² *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

art. Moreover, *during patent examination, the pending claims must be interpreted as broadly as their terms reasonably allow*¹³.

Regarding the argument that the *In re Venner* case “is beside the point” because appellant’s invention is “not merely automating a manual activity,” the rejection did not state that the claimed invention was “merely automating a manual activity,” thus the argument is irrelevant. The *In re Venner* case is indeed pertinent, as the claimed invention indeed includes automation, and the applied prior art does not expressly include such automation.

Appellant offers no arguments in contravention to the axiom espoused in *Venner*, that simply providing a mechanical or automatic means to replace manual activity which has accomplished the same result involves only routine skill in the art, and a legal precedent establishing such a rationale is valid, as *the rationale to modify or combine the prior art does not have to be expressly stated in the prior art; the rationale may be expressly or impliedly contained in the prior art or it may be reasoned from knowledge generally available to one of ordinary skill in the art, established scientific principles, or legal precedent established by prior case law*¹⁴


¹³ *In re Zletz*, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989).

¹⁴ *Sources of Rationale Supporting a Rejection Under 35 U.S.C. 103*, MPEP § 2144.

For all of the above reasons, it is believed that the rejection should be sustained.


Respectfully submitted,

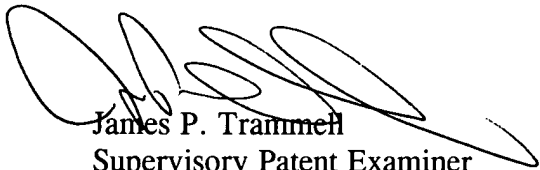
Date: November 17, 2003


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